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EXAMINER

ROSSI, JESSICA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,417

Applicant(s)

DANKO, PETER

Examiner

Jessica L. Rossi

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/13/06, Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 15 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 31-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 3/13/06. Claim 13 was cancelled. Claims 31-42 were added. Claims 1-12, 14-15 and 31-42 are pending but claim 15 remains withdrawn from further consideration.
2. Previously withdrawn claims 3-5 and 10 have been rejoined in light of Applicant's arguments and new claims 31-42, which demonstrate that 'abutting' and 'overlapping' are not mutually exclusive.
3. The rejection of claim 1 under 35 USC 112 2nd paragraph, as set forth in paragraph 10 of the previous action, has been withdrawn in light of Applicant's remarks.
4. The rejection of claim 1 under 35 USC 102(b) as being anticipated by Kamal (US 4347955, of record), as set forth in paragraph 12 of the previous action has been withdrawn in light of the present amendment and Applicant's arguments with respect thereto – the reference fails to teach or suggest the first layer being spaced apart from the second layer by a rib interconnected therewith and the closed end defining a space between the rib and the closed end.
5. The rejection of claim 1 under 35 USC 102(b) as being anticipated by Olsen (US 4201609, as set forth in paragraph 13 of the previous action, has been withdrawn in light of the present amendment; with respect to independent claims 1, 31 and 37 – the reference fails to teach or suggest the first layer being spaced apart from the second layer by a rib interconnected therewith and the closed end defining a space between the rib and the closed end.
6. The rejection of claim 1 under 35 USC 102(b) as being anticipated by LoMaglio (US 4356053, of record), as set forth in paragraph 14 of the previous action, has been withdrawn in

Art Unit: 1733

light of the present amendment – the reference fails to or suggest the first layer being spaced apart from the second layer by a rib interconnected therewith and the closed end defining a space between the rib and the closed end.

7. The rejection of claim 1 under 35 USC 102(b) as being anticipated by Nagata et al. (US 4507348, of record), as set forth in paragraph 15 of the previous action, has been withdrawn in light of Applicant's arguments – the reference fails to teach or suggest closing an open end of the panel.

8. The rejection of claim 1 under 35 USC 102(b) as being anticipated by Ruemeli et al. (US 5069738, of record), as set forth in paragraph 17 of the previous action has been withdrawn in light of the present amendment – the reference teaches away from the rib 4 being interconnected with the first and/or second layers 7, 8.

Claim Rejections - 35 USC § 102

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-8, 10-11, 31-33, 35, 37-39 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Maughan (US 3929536, of record).

Maughan teaches a method of closing an open end of a ribbed/corrugated thermoplastic panel having a first layer 15 with a first end and a second layer 30 with a second end with the first layer being spaced apart from the second layer by a rib interconnected therewith (column 3, line 65 – column 4, line 23), the first and second ends defining the open end, and the first and second layers being heat weldable or fusible. The reference teaches rolling at least the first layer along a surface toward the second layer and contacting the first layer with the second layer and

Art Unit: 1733

fusing the first and second layers by heating at least one portion of the first layer that contacts the second layer and a portion of the second layer that contacts the first layer to form a closed end extending proximate an edge of the ribbed thermoplastic panel and to define a space between the rib and the closed end. (Figures 3-4; column 2, lines 28-29; column 4, lines 30-35; column 5, lines 10-20)

Regarding the dependent claims, Applicant is directed to the previous action.

11. Claims 37-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruemeli et al. (US 5069738, of record).

Ruemeli teaches a method of closing an open end of a thermoplastic panel having a first layer 7 with a first free end and a second layer 8 with a second free end with the first layer being spaced apart from the second layer by a member 4 extending therebetween, the first and second ends defining a first open end, and the first and second layers being heat sealable to each other, and the thermoplastic panel further having a plurality of interior open regions 5. The reference teaches guiding at least the first free end along a surface so that a first portion of the first layer bends and abuts a second portion of the second layer and heat sealing the abutting first and second portions to form a closed end extending proximate an edge of the thermoplastic panel and to define a space between the member and the closed end. (Figures 1, 3, 4a-d and 7.1-7.5; column 1, lines 19-22 and 33-41; column 2, lines 21-24 and 32-40; column 4, line 35 – column 5, line 45)

Regarding claims 38-39, the reference teaches such.

Art Unit: 1733

Claim Rejections - 35 USC § 103

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 12, 14, 36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maughan as applied to claims 1, 31 and 37 above.

Regarding claim 12, Applicant is directed to the previous action.

Regarding claim 14, Maughan teaches the first and second layers of the ribbed thermoplastic panel being thermoplastic (column 2, lines 62-65); selection of a particular thermoplastic would have been within purview of one having ordinary skill in the art.

Regarding claims 36 and 42, selection of a particular heat sealing means would have been within purview of one having ordinary skill in the art.

14. Claim 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruemeli et al. as applied to claim 37 above.

Regarding claim 42, selection of a particular heat sealing means would have been within purview of one having ordinary skill in the art.

15. Claims 1-5, 7-9, 14, 31-34, 36-40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima et al. (US 3630806, of record) in view of the collective teachings of Washburn (US 3579396, of record), Jessee (US 3616077, of record) and Bousquet (US 3031356, of record) and further in view of the collective teachings of Glans et al. (US 4606784, of record), Tarko (US H556, of record) and Ruemeli.

Kitajima teaches a packaging/container material comprising a ribbed/corrugated thermoplastic panel having a first thermoplastic layer 101 with a first end and a second

Art Unit: 1733

thermoplastic layer 103 with a second end, with the first layer being spaced apart from the second layer by a rib 100' interconnected therewith (Figure 2; column 5, lines 14-75). The first and second ends define an open end of the packaging/container material, with the first and second layers being heat weldable or fusible (both first and second layers are thermoplastic; column 1, lines 5-31; column 2, lines 41-42; column 4, lines 42-47 and 60-62; column 5, lines 15-18).

It is unclear as to whether the reference teaches closing the open end of the packaging/container material. Therefore, it is unclear as to whether the reference teaches rolling at least the first layer along a surface toward the second layer and contacting the first layer with the second layer and fusing the first and second layers by heating at least one portion of the first layer that contacts the second layer and a portion of the second layer that contacts the first layer to form a closed end extending proximate an edge of the ribbed thermoplastic panel and to define a space between the rib and the closed end.

It is known in the packaging/container art to bond facing sheets to both sides of a ribbed/corrugated panel where at least one of the facing sheets is rolled along a surface toward the other facing sheet to contact the other facing sheet and then the facing sheets are bonded to each other to close the open ends of the panel so as to *prevent contaminants from entering the open ends*, as taught by the collective teachings of Washburn (Figure 8; column 1, lines 39 – column 2, line 2), Jessee (Figure 4; column 1, lines 5-20) and Bousquet (Figures 7-8; column 1, lines 11-20).

The examiner appreciates that Washburn, Jessee and Bousquet all use adhesive to bond the facing sheets to each other; however, this is because all of them use paper/paperboard for the

Art Unit: 1733

panel and facing sheets, unlike the thermoplastic panel and thermoplastic facing sheets used by Kitajima. Therefore, while Washburn, Jessee and Bousquet allow one having ordinary skill to appreciate the need in the packaging/container art to close open ends of a ribbed/corrugated panel having first and second facing sheets, one would clearly be motivated to look beyond these references to additional teachings where thermoplastic facing sheets are being joined to each other to close open ends of a panel.

It is known in a variety of arts, including the packaging/container art, to close open ends of a panel having *thermoplastic* facing sheets disposed on both sides of a member (can be flat member or ribbed/corrugated member), by rolling at least one of the facing sheets along a surface toward the other facing sheet to contact the facing sheets and then bonding the facing sheets to each other by *heat welding/fusing* them to form a closed end extending proximate an edge of the panel and to define a space between the member and the closed end, as taught by the collective teachings of Glans (abstract; column 1, lines 8-26; column 6, lines 34-61; column 8, lines 28-29 and 41-57 and 62-63), Tarko (Figures; abstract; column 4, lines 46-56; column 5, lines 12) and Ruemeli (column 2, lines 39-40).

Therefore, it would have been obvious to roll at least the first layer of Kitajima along a surface toward the second layer and contact the first layer with the second layer and fuse the first and second layers by heating at least one portion of the first layer that contacts the second layer and a portion of the second layer that contacts the first layer to form a closed end extending proximate an edge of the ribbed/corrugated thermoplastic panel and to define a space between the rib and the closed end because closing open ends of ribbed/corrugated panels is known in the art for preventing contaminants from entering the open ends of the panel, as taught by the

Art Unit: 1733

collective teachings of Washburn, Jessee and Bousquet, and heat welding/fusing thermoplastic layers to close the open ends of panels eliminates the need for a separate bonding material, as taught by the collective teachings of Glans, Tarko and Ruemeli.

Regarding claims 36 and 42, selection of a particular heat sealing means would have been within purview of one having ordinary skill in the art.

Regarding all other dependent claims, Applicant is directed to the previous action.

16. Claims 6, 10-11, 35 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima in view of the collective teachings of Washburn, Jessee and Bousquet and further in view of the collective teachings of Glans, Tarko and Ruemeli as applied to claim 1 above, and further in view of the Wagers et al. (US 3785908, of record) and Hall et al. (US 5545279, of record).

Regarding these dependent claims, Applicant is directed to the previous action.

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima in view of the collective teachings of Washburn, Jessee and Bousquet and further in view of the collective teachings of Glans, Tarko and Ruemeli as applied to claim 1 above, and further in view of Rias (US 5246516, of record).

Regarding claim 12, Applicant is directed to the previous action.

Response to Arguments

18. Applicant's arguments filed 3/13/06 have been fully considered but they are not persuasive.

19. On p. 11 of the remarks, Applicant argues that Maughan teaches ribbed/corrugated layer being paperboard and therefore the reference is completely unrelated to a ribbed thermoplastic

Art Unit: 1733

panel as claimed in claim 1. The examiner would like to point out that the present claim language does not state that the rib is thermoplastic. The present claim only states a 'ribbed thermoplastic panel' wherein such language clearly does not limit the claim to both the first and second layers and the rib being thermoplastic. Therefore, since the first and second layers comprising the ribbed panel of Maughan are thermoplastic, Maughan teaches a 'ribbed thermoplastic panel.'

Applicant also argues that the plastic films (first and second layers) of Maughan are distinct from the corrugated paperboard; in particular, the plastic films are the components joined at seam 55 and therefore this is in contrast to pending claim 1 where portions of the panel are subjected to the rolling and fusing. This argument is not commensurate with the scope of the claimed invention because present claim 1 does not exclude a panel having a first layer that is spaced apart from a second layer by a rib that is interconnected therewith by heat welding/fusing, as taught by Maughan (ribbed/corrugated member has first and second film layers fused to their respective sides of the member; column 3, line 65 – column 4, line 22). In fact, the examiner would like to point out that this is exactly how the panel of the present invention is made (p. 7, lines 19-21). Therefore, the panel of Maughan comprises the first and second layers and the rib wherein the first and second layers are rolled and fused; therefore, Maughan teaches portions of the panel being rolled and fused.

20. On p. 12 of the remarks, Applicant argues that Ruemeli is completely unrelated to a ribbed thermoplastic panel as set forth in present claim 1 because the films 7, 8 of Ruemeli are distinct from the board. The examiner reminds Applicant that Ruemeli is no longer being used as a primary reference against claim 1.

Art Unit: 1733

21. On p. 12 of the remarks, Applicant argues that the office actions fails to identify any suggestion to combine Kitajima, Washburn, Jessee, Bousquet, Glans, Tarko and Ruemeli to arrive at the claimed invention. The examiner invites Applicant to reread the rejection of claim 1, as set forth in paragraph 15 above, where it is clearly established that one of ordinary skill in the art would be motivated to modify Kitajima in view of the collective teachings of Washburn, Jessee and Bousquet and further in view of the collective teachings of Glans, Tarko and Ruemeli. To reiterate...

It is known in the packaging/container art to bond facing sheets to both sides of a ribbed/corrugated panel where at least one of the facing sheets is rolled along a surface toward the other facing sheet to contact the other facing sheet and then the facing sheets are bonded to each other to close the open ends of the panel so as to *prevent contaminants from entering the open ends*, as taught by the collective teachings of Washburn (Figure 8; column 1, lines 39 – column 2, line 2), Jessee (Figure 4; column 1, lines 5-20) and Bousquet (Figures 7-8; column 1, lines 11-20).

The examiner appreciates that Washburn, Jessee and Bousquet all use adhesive to bond the facing sheets to each other; however, this is because all of them use paper/paperboard for the panel and facing sheets, unlike the thermoplastic panel and thermoplastic facing sheets used by Kitajima. Therefore, while Washburn, Jessee and Bousquet allow one having ordinary skill to appreciate the need in the packaging/container art to close open ends of a ribbed/corrugated panel having first and second facing sheets, one would clearly be motivated to look beyond these references to additional teachings where thermoplastic facing sheets are being joined to each other to close open ends of a panel.

Art Unit: 1733

It is known in a variety of arts, including the packaging/container art, to close open ends of a panel having thermoplastic facing sheets disposed on both sides of a member (can be flat or ribbed/corrugated), by rolling at least one of the facing sheets along a surface toward the other facing sheet to contact the facing sheets and then bonding the facing sheets to each other by *heat welding/fusing* them to form a closed end extending proximate an edge of the panel and to define a space between the member and the closed end, as taught by the collective teachings of Glans (abstract; column 1, lines 8-26; column 6, lines 34-61; column 8, lines 28-29 and 41-57 and 62-63), Tarko (Figures; abstract; column 4, lines 46-56; column 5, lines 12) and Ruemeli (column 2, lines 39-40).

Therefore, it would have been obvious to roll at least the first layer of Kitajima along a surface toward the second layer and contact the first layer with the second layer and fuse the first and second layers by heating at least one portion of the first layer that contacts the second layer and a portion of the second layer that contacts the first layer to form a closed end extending proximate an edge of the ribbed/corrugated thermoplastic panel and to define a space between the rib and the closed end because closing open ends of ribbed/corrugated panels is known in the art for preventing contaminants from entering the open ends of the panel, as taught by the collective teachings of Washburn, Jessee and Bousquet, and heat welding/fusing thermoplastic layers to close the open ends of panels eliminates the need for a separate bonding material, as taught by the collective teachings of Glans, Tarko and Ruemeli.

One reading this rejection would clearly appreciate that the collective teachings of Washburn, Jessee and Bousquet were solely provided as evidence that the container/packaging art, as it relates to ribbed/corrugated panels, recognizes the importance of closing open ends of

Art Unit: 1733

the panel to *prevent contaminants from entering the panel* while the collective teachings of Glans, Tarko and Ruemeli were additionally provided to show it being known in a variety of arts, including the container/packaging art, to close open ends of a panel having *thermoplastic* facing sheets disposed on both sides of a member (flat or ribbed/corrugated) by rolling at least one of the facing sheets along a surface toward the other facing sheet to contact the facing sheets and then bonding the facing sheets to each other by *heat welding/fusing* them to form a closed end extending proximate an edge of the panel and to define a space between the member and the closed end.

On p. 13 of the remarks, Applicant argues that Washburn, Jessee and Bousquet use bonding agents to join the first and second layers and therefore teach away from the claimed invention. The examiner invites Applicant to once again reread paragraph 15 above and the previous paragraphs where the examiner acknowledges that these references use a bonding agents and clearly establishes that these references are only being used as evidence that the container/packaging art, as it relates to ribbed/corrugated panels, recognizes the importance of closing open ends of the panel to prevent contaminants from entering the panel.

Applicant also argues that Glans and Tarko are unrelated to a ribbed thermoplastic panel. The examiner appreciates that the member located between the first and second thermoplastic layers of Glans is not ribbed per se; however, this reference was only relied on for its teaching of heat welding/fusing portions of the first and second thermoplastic layers to close open ends of a panel in the container/packaging art (abstract; column 1, lines 8-26; column 6, lines 34-61; column 8, lines 28-29 and 41-57 and 62-63). As for Tarko, the examiner disagrees with Applicant because this reference clearly teaches a ribbed thermoplastic panel comprising a

Art Unit: 1733

thermoplastic ribbed/corrugated core having first and second thermoplastic layers interconnected to the top and bottom surfaces of the core, respectively, with portions of the first and second layers heat welded/fused to each other to close the open ends of the panel (Figures; abstract; column 4, lines 46-56; column 5, lines 12).

Applicant argues with respect to Ruemeli that this reference teaches the films 7, 8 being distinct from the board. The examiner points out that Ruemeli is only used to show it being known in the panel art to heat weld/fuse portions of first and second thermoplastic layers located on the top and bottom surfaces of an intermediate member, respectively, to each other to close open ends of the panel (column 2, lines 39-40).

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1733

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JESSICA ROSSI
PRIMARY EXAMINER

